DOCUMENT RESUME

ED 395 900 SP 036 698

AUTHOR	Mostert, Mark P.; Sudzina, Mary R.
TITLE	Undergraduate Case Method Teaching: Pedagogical Assumptions vs. the Real World.
PUB DATE	Feb 96
NOTE	10p.; Paper presented at the Annual Meeting of the Association of Teacher Educators (St. Louis, MO, February, 1996).
PUB TYPE	Information Analyses (070) -- Speeches/Conference Papers (150)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Case Studies; Classroom Techniques; Elementary Secondary Education; Higher Education; *Preservice Teacher Education; *Teaching Methods; Theory Practice Relationship; Undergraduate Students; Undergraduate Study
IDENTIFIERS	*Case Method (Teaching Technique); Preservice Teachers

ABSTRACT

Writing and teaching case studies of problematic educational situations or events to undergraduate preservice teachers raises several practical issues relevant to the success of the method. These concerns include: knowledge of the undergirding rationale for using cases; knowledge of the advantages, disadvantages, and practical problems in case method teaching; and the availability and location of appropriate cases. A rationale for using case studies in teacher education is that they depict non-linear, complex realities of professional classroom practices, quite different from the cause-effect linear relationships of experimental research. Generic advantages and disadvantages of using case method teaching are summarized from K. K. Merseth (1990, 1991). For example, cases provide a versatile teaching method, but they are highly dependent on the instructional and educational characteristics of the instructor. Common practical problems involving case study methods are the class size, unfamiliarity with the methodology, problems with written expression, time, physical setting for the discussion, teaching style of the case leader, and case preparation and complexity. Advantages of case study methodology include greater student and faculty interest and interactivity, vicarious learning, and increased reflection. Issues specific to undergraduates include the complexity of the case issues, inexperience with case analysis, and difficulties with writing. Possible ethical problems in using and writing case studies are outlined, and sources for education-appropriate case studies are cited. (Contains 33 references.) (NAV)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 395 900

Undergraduate Case Method Teaching: Pedagogical Assumptions vs. the Real World

Mark P. Mostert
Moorhead State University

and

Mary R. Sudzina
University of Dayton

Interactive Symposium presented at the annual meeting of the Association of Teacher Educators, St. Louis, MO, February, 1996.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

M. Mostert

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

SP036098

BEST COPY AVAILABLE

Undergraduate Case Method Teaching: Pedagogical Assumptions vs. the Real World

Practical Issues in Teaching Case Studies

Writing and teaching case studies of problematic educational situations or events to preservice undergraduates raises several practical issues relevant to the success of the method including (a) knowledge of the undergirding rationale for using cases, (b) a knowledge of the advantages, disadvantages, and practical problems in case method teaching, and (c) the availability and location of appropriate cases. This paper addresses these questions by briefly summarizing the state of the field as it applies to teaching preservice teachers.

Rationale for the Use of Cases

Generally in research and teaching, case studies have been seen as a precursor to legitimate scientific research or as a way of studying extremely rare, "one shot" phenomena (Campbell & Stanley, 1963). An alternative view, however, suggests that cases can describe real-world contextual problems that are too complex to approach experimentally (Glaser & Strauss, 1967; Lincoln & Guba, 1985; Patton, 1990). Several scholars (e.g., Patton, 1990; Yin, 1984) have argued for the use of cases in a broader sense on the grounds that:

1. Cases are ideal for the detailed, thick description necessary to explore the multidimensional nature of what teachers do in classrooms;
2. Cases are an effective means of communicating research results in a comprehensive and comprehensible form to almost any intended audience;
3. Cases investigate phenomena in a real-life context;
4. Cases are appropriate where the boundaries between the phenomenon and the setting, as in classroom instruction, are not clearly evident; and
5. Cases use multiple sources of evidence to describe the phenomenon under investigation.

Case method teaching is less well known in education than in law or business schools of higher education (see Carter & Unklesbay, 1989). Recently, however, teacher educators have turned to case teaching as an instructional method. This interest in case teaching has led investigators to examine the underlying concepts and processes of the method to evaluate its efficacy in comparison to other instructional methods.

Preliminary investigation has yielded a number of tentative undergirding principles suggesting that cases are a valuable instructional method in educating preservice teachers because:

1. the non-linear, complex realities of professional classroom practice are quite different from the cause-effect linear relationships of experimental research. Case-based instruction emphasizes context-dependent practical problem solving;
2. in the classroom, teachers make multiple, complicated decisions and observations set in unpredictable circumstances. Cases communicate a strong sense of complex teacher-pupil interactions, perceptions, and decision making;
3. the unique situational circumstances of teaching reflect the rich, contextual qualities of teaching, as do cases;
4. to survive the contextual unpredictability of the classroom, teachers use practical knowledge to cue professional decisions and actions for appropriate problem-solving. Case teaching emphasizes the centrality of professional decisions or actions and their variance according to distinctive, real-world case situations (Mostert & Kauffman, 1992).

Case Method Literature in Education

These and other undergirding assumptions have spawned several notable lines of exploration, including ethical issues in case writing and teaching (e.g., Kleinfeld 1990b; Shulman, 1990), the potential for using cases in the preparation of elementary and secondary teachers (e.g., Sudzina & Kilbane, 1992) and special education teachers (e.g., Mostert, 1995, 1996; Mostert & Kauffman, 1993), assessing what students learn from cases (e.g., James, 1992; Kleinfeld 1991a, 1991b; Lundeberg, 1993b; Mostert & Kauffman, 1992; White & Mostert, 1995; Reffel & Bartelheim, 1993), the value and efficacy of case teaching (e.g., Carter & Unklesbay, 1989, Harrington, 1991; Merseth, 1991), the possibility of gender differences in case analysis (e.g., Lundeberg, 1993a), instructor perceptions of using the case method (e.g., Kleinfeld, 1991a; White & McNergney, 1991; Wineburg, 1991), and funded projects to build a corpus of cases (e.g., Hutchings, 1992).

Generic Advantages and Disadvantages of Case Teaching

Merseth (1990, 1991) has summarized some advantages and disadvantages of case studies:

Advantages

1. Cases provide a versatile teaching medium.
2. Cases provide analyses of problematic situations at various levels of abstraction and from multiple points of view.
3. Cases tend to attract commentary and views from all or most members of the class.
4. Cases help students develop analytical and problem solving skills.
5. Cases encourage reflection and decision-making for action and familiarity with this process.
6. Cases involve students in their own learning.
7. Cases encourage collegial communities of professionals.

Disadvantages

1. Cases are highly dependent on the instructional and educational characteristics of the instructor.
2. Existing case studies are not found equally in different levels of education or in a variety of content areas.
3. Case preparation and instructional start-up costs can be substantial.
4. There are few existing guidelines for writing cases.

Common Practical Problems and Advantages in Case Teaching

Less attention has been paid to the practical problems which routinely arise when teaching by the case method. We briefly discuss several of the more pressing difficulties we have encountered in our own professional practice when teaching cases to preservice teachers.

Class Size Case method teaching works best with small groups of students. A class of 12-15 people seems to provide enough diverse opinions and opportunities for active participation in case discussion. Given the enrollment patterns of most undergraduate courses, however, these numbers are idealistic. Commonly, undergraduate education classes contain many more students, typically 30-40 students. As the number of students increases, the less likely it will be that everyone will have an equal opportunity to participate. One way to deal with this problem is to divide the class into teams of 4 or 5 students with a recorder who then reports the group's analysis to the class. Often, in smaller groups, students who otherwise would have been unwilling to participate make insightful contributions to the discussion.

Unfamiliarity with Case Teaching For most students, discussing a case and its ramifications is an unfamiliar experience. Students are often socialized into the standard lecture format and they appear to have difficulty adjusting their expectations of knowledge acquisition and responses to an unfamiliar instructional setting. The flow and depth of the discussion may be disrupted by students being uncertain of how to respond to prompts from the case leader or other students. Often, undergraduates feel that the instructor is acquiescing their role as instructional leader by not giving them the correct answer to a case. Students can, therefore, become frustrated by not trusting their own judgement and that of their colleagues to arrive at workable solutions with the aid of theory and research. One solution to this problem might be to use a conceptual framework (McNergney & Ford, 1994) which asks the participants to respond in the case analysis to 5 categories: issues, perspectives, actions, consequences and knowledge needed.

Problems in Written Expression Initially, students find writing responses to cases difficult. In spite of explicit instructions that they are to respond to the cases out of their personal and professional knowledge which may or may not have been modified by class discussion, students are often confused as to what they are expected to do. They seem to be accustomed to providing written responses which are strictly factual, or at least discoverable from their textbook. They find it difficult to articulate their personal and individual responses to the dilemmas posed in the case.

Relating Cases to a Theoretical Base Even if students are able to respond to case dilemmas with insight and articulated argument, they may still find it difficult to relate their opinions to the theoretical content of the course. They tend to view the practical nature of the cases as separate from the theoretical bases of the course.

Time Cases vary in their level of complexity and analytical depth. However, if case discussions are to be beneficial, the analytical levels which can be extracted from the story take time to uncover. How long this is likely to take depends of the complexity of the individual case, the willingness of the students to engage in focused discussion, time allocated for the discussion, and the skill of the case leader.

Physical Setting for the Discussion The physical setting in which the case discussion takes place can add to or detract from the case analysis in that case discussions tend to be intensive and often generate high levels of emotion. The setting becomes pivotal when case discussions occur over extended periods of time. Ideally, a seated circle or horseshoe allows improved eye contact and positioning for effective verbal and nonverbal communication. Also, movable chairs allow for team discussions in large groups. It may be important for each student to have a writing surface available rather than an open seat. Lighting and ventilation are also important. The physical setting is also important to allow mobility of the case leader.

Students' Names In teaching large classes it is often difficult to learn all the students' names by the end of the course, let alone in time to conduct a case discussion. However, knowing the names of the participants is important because it facilitates communication between the case leader and the students and encourages cross-talk and direct communication with other members of the class. Name placards or photos matched to the students' names can also help instructors alleviate any impersonal aspects of case discussion.

Teaching Style of the Case Leader Teaching cases seems to be closely linked to the teaching style of the case leader. The interactive nature required in discussing cases necessitates a level of energy and concentration which may not be necessary for other forms of instruction.

Case Preparation Preparing cases for instruction is a labor intensive

activity which constantly evolves depending on the purpose for which the case is used and the course content to which it is linked. Rarely can instructors hope to use the same preparation from one use of the case to the next. In addition, repeated use of most cases will lead to greater and more fine-grained insights which change the nature of the approach to teaching the case. Preparation for students can also be time consuming. Preferably, students are required to read the case ahead of time and prepare notes that document their insights based on reflection, connections to the course content, and their own experiences. Some students may therefore find preparing cases quite difficult if they have not had previous experience with case method teaching, problem solving and analysis.

Case Emphases Novice case instructors often encounter difficulty in deciding what to emphasize when teaching the case. Especially seductive is the tendency to spend too much class time recounting the actual events or situations of the case at the expense of discussion which will elicit insight to given dilemmas and for generating solutions.

Speculation Many novice instructors and students expand the case discussion beyond the details and facts presented in the case. If we assume that cases are carefully written with a particular purpose in mind, as they should be, then case discussions are more likely to bear fruit if discussion only revolves around what appears in the case. If this does not happen, speculation can derail the focus and intended purpose of the session very quickly.

Case Complexity Case complexity varies from case to case. However, most cases embody several layers of meaning which can benefit students as they apply the case to the course content or their educational knowledge base. Such complexity, while providing obvious advantages, can also be a drawback. For example, deeper levels of complexity are not immediately obvious and may take an inordinate amount of time to uncover; students who lack classroom experience may be unable to recognize the finer issues presented in the case, and without adequate preparation and reflection, deeper case issues might remain hidden, thereby preventing a more intricate level of analysis and learning. For typical undergraduates it may be more productive to illuminate the obvious themes such as classroom management or an ethical dilemma, and illustrate the variety of choices and solutions possible.

Strategies for Introducing Cases Student interest and willingness to engage in energetic case discussions can be significantly affected by how the case is introduced. Traditional introductions, role playing, surprises, the use of videotape or audiotape, etc., all have potential benefits and drawbacks. How effectively cases are introduced will depend, for example, on the case experience and motivation of the students and the instructor, a careful assessment of each set of class response characteristics, and a close match between the course and case content and how it is introduced.

Communication in Case Discussions Because case method teaching relies heavily on discussion, in-class reflection, and the participants' ability to convey their views, good communication is essential. It is sometimes difficult to get students to talk to each other rather than to the instructor and inarticulate comments are sometimes difficult to clarify without disrupting the momentum of the discussion.

Participation in Case Discussion It is rare that all students in a case discussion will be eager to participate and state their views without hesitation. This is especially prominent in undergraduate case instruction where many students seem to defer to the instructor. However, at any level, there may be several students who, for a variety of reasons, appear reluctant to participate. Some of these students do participate after a few sessions of listening to their peers, while others choose to remain silent for any case

BEST COPY AVAILABLE

discussion.

Questioning Techniques Novice case instructors often have difficulty in asking questions that will elicit responses to fuel the momentum of case discussion. Questions which elicit "yes/no" responses or do not challenge students to explain their views and insights will not provide sufficient stimulus for other participants and can quickly lead to "discussion inertia."

Focused Case Discussion Given the complexity of most cases and the diverse views likely to be held by the participants, keeping the discussion focused according to the objectives of the course and the course content can be difficult. Many unanticipated unique and interesting issues might tempt the instructor to change the course of the discussion. While this may prove useful in some instances, it can often mean that the original intent of presenting the case is lost.

Lack of Knowledge of General Educational Settings Most preservice teachers lack not only classroom experience in their own discipline, but many (especially undergraduates) lack knowledge of a general education context. Such a lack of knowledge provides a constraint on dealing with the complexity of the case discussion.

Professional Experience For many experienced practitioners the bridges between complex case situations and overarching educational theory are far clearer than for inexperienced or novice practitioners. In teaching cases, difficulty often arises in getting students to relate the nuances presented in the case with the course content and educational theory.

Lack of Professional Support Case teaching can be a lonely business. Many faculty members are skeptical of the utility of case teaching and may even dismiss the method as a simplistic attempt to avoid the demanding work of teaching. However, as Allen (1994) has pointed out, case-based teaching may actually reinforce course content as the in-depth discussion of teaching issues leads to higher levels of questioning and retention of course content.

Common Practical Advantages

There are also several distinct advantages to case method teaching. We list the most common.

Student Interest Possibly because of its novel approach, students at all levels seem to enjoy case discussions. They are often impressed with the complexity of cases and find the discussions a valuable way to supplement theoretical coursework.

Faculty Interest Faculty often seem curious about case teaching, although they seem less willing to attempt case teaching in their own classes.

Vicarious Learning Probably the most important advantage of case teaching involves the ability of cases to provide excellent opportunities for vicarious learning. Undergraduates often report relief that they were able to examine complex problematic professional situations and risk discussing their solutions in the relative safety of a classroom setting before they venture into the field.

Increased Reflection on Professional Problems Case teaching encourages reflective thinking. Case dilemmas effectively prompt undergraduates to consider a range of solutions and emphasizes that students not only have to know what to do, but why they are doing it.

Interactive Case teaching promotes collaboration and classroom interaction for all students irrespective of their levels of experience or

professional orientation.

Practitioner Cases by Practitioners Experienced teachers and even inexperienced undergraduates seem to gain significant insights into their professional personas by writing their own cases. In addition, the very act of writing the cases created new insights and generates new solutions to the pondered problem.

Issues More Specific to Undergraduates

There is some evidence that case-based pedagogical issues for undergraduates differ from those relating to graduate students or experienced teachers (e.g., Mostert & Kauffman, 1992). In summary, we find that the following issues are most cogent in teaching undergraduate preservice teachers.

Complexity of Case Issues Most cases generate a number of different but interconnected professional dilemmas which can be examined and discussed in multiple layers of analysis. Generally, preservice teachers, absent knowledge of the real world of teaching, often become confused or distracted by this case characteristic. Such confusion can potentially derail even the best case teaching and also increases the possibility that students will see case analysis as aversive. One way of avoiding this problem is for the case leader to maintain a focus on a single or a very few fairly obvious case issues.

Directive Teaching Given that most students are typically socialized to seeing course instructors as holders of knowledge and truth, they are often nonplussed when asked for their perceptions, judgements, or opinions. If students are indeed novice case analysts, we have found it more practical to be more directive and less subtle than we might be teaching cases to graduate students of experienced teachers. As students become more comfortable with their own abilities in analyzing cases, course instructors can resume a more facilitative role.

Inexperience Case analysis, because it relies heavily on personal, practical, professional, and content knowledge, assumes that students bring to the analysis a wealth of experience that will allow them to extract optimum instruction from the professional issues cases present. Again, undergraduate preservice teachers are less likely to possess high levels of professional experience that will allow them to engage in deeper analysis. Case instructors should carefully gauge the knowledge needed for analyzing any particular case and match it to the students, or teach necessary content ahead of time.

Modeling Because case-based teaching, at least initially, is so foreign to many students, it is important that the instructor be highly skilled in modeling case discussion and interpersonal communication skills.

Explicit Teaching of Access to Resources A common problem once students understand the rudiments of case analysis, they often have difficulty matching case problems to course content. If they are able to do this, they often have difficulty accessing various information sources other than the course text. Instructors should explicitly teach and model where such resource information may be found.

Writing Case Analyses Not only is case analysis a relatively difficult intellectual exercise, but expressing the results of this intellectual work in writing for written case analyses is often difficult for undergraduates no experienced in writing such analyses or because of ineffective writing skills. Given these constraints, instructor should provide explicit information on how to write a case analysis.

Where to Find Appropriate Cases

Aside from the general research in the area, several books containing cases have added to the utility of the method by providing, in varying degrees, both cases and guidance on how to teach them (e.g., Greenwood & Parkay, 1989; Kowlaski, Weaver, & Henson 1990; Kauffman, Mostert, Nuttycombe, Trent & Hallahan, 1993a, 1993b; Silverman, Welty & Lyons, 1990a, 1990b; Shulman & Colbert, 1987, 1988; Small & Strzepek, 1989). Several of these texts are reviewed by McAninch (1991) and Kleinfeld (1990b). Given that the base of cases available in education is small compared to the corpus available in law and business, several efforts are under way to build specific case bases for educational purposes (e.g., Hutchings, 1992). In addition, many case instructors write their own cases to serve the needs of their particular course demands. Such efforts have been encouraged, for example, by the establishment of case writing competitions. The emphasis on case writing has, in turn, led to discussions on how to write cases and what cases should include.

Ethical Problems

There are several ethical problems attached to writing and teaching cases. Shulman (1990) documents some elements involved, while Kleinfeld (1990b) suggests that ethical concerns center on the following domains which are pivotal:

Doing No Harm Any information in the case should not harm any of the characters or readers.

Informed Consent Cases should not be written without the express permission of the people involved. While this is usually problematic, informed consent may become an issue if the final case "takes and different shape than originally anticipated" (Klienfeld, 1990b, pp. 7).

Confidentiality As with informed consent, confidentiality if a given principle in social research. Confidentiality is most often an issue in obtaining initial consent and in disguising some details of the case.

Legal Liability The possibility for libel clearly exists in writing cases, although no precedents have been set in this area.

References

Buzzell, J. B., & Piazza, R. (1994). Case studies for teaching special needs and at-risk students. Albany, NY: Delmar Publishers.

Campbell, D. T. & Stanley J. C. (1963). Experimental and quasi-experimental designs for research on teaching. In N. L. Gage (Ed.), Handbook of research on teaching, (2nd ed,) (pp. 171-246). Chicago: Rand McNally.

Carter, K., & Unklesbay, R. (1989). Cases in teaching and law. Journal of Curriculum Studies, 21(6), 527-536.

Christensen, C. R. (1987). Teaching and the case method. Boston, MA: Harvard Business School.

Glaser, B. G. & Strauss, A. L. (1967). The discovery ofgrounded theory. New York: Aldine de Gruyter.

Greenwood, G. E., & Parkay, F. W. (1989). Case studies for teacher decision making. New York: Random House.

Harrington, H. (1991). The case as method. Action in Teacher Education, 12(4), 1-10.

Hutchings, P. (1992). Report on the AAHE teaching initiative. Available from P. Hutchings, AAHE, 1 Dupont Circle, Suite 600, Washington, DC. 20036-110.

James, F. (1992). Case-based or traditional didactic instruction: Which tells the story for preservice teachers? Paper presented at the annual meeting of the American Educational Research Association, San Francisco, California.

Kagan, D. M., & Tippins, D. J. (1991). How teachers' classroom cases express their pedagogical beliefs. Journal of Teacher Education, 42, 281-291.

Kauffman, J. M., Mostert, M. P., Nuttycombe, D. G., Trent, S. C. & Hallahan, D. P. (1993). Managing classroom behavior: A reflective case-based approach. New York: Allyn & Bacon.

Kauffman, J. M., Mostert, M. P., Nuttycombe, D. G., Trent, S. C. & Hallahan, D. P. (1993). Instructor's manual: Managing classroom behavior: A reflective case-based approach. New York: Allyn & Bacon.

Kleinfeld, J. S. (1990, June). Ethical issues and legal liability in writing cases about teaching . (Available from J. S. Kleinfeld, University of Alaska, Fairbanks, Fairbanks, Alaska 99775).

Kleinfeld, J. (1991a, April). Wrestling with the angel: What student teachers learn from writing cases. Paper presented at the annual meeting of the American Educational Research Association, Chicago, Illinois.

Kleinfeld, J. (1991b, April). Changes in problem solving abilities of students taught through case methods. Paper presented at the annual meeting of the American Educational Research Association, Chicago, Illinois.

Kowalski, T. J., Weaver, R. A., & Henson, K. T. (1990). Case studies on teaching. New York: Longman.

Leenders, M. R., & Erskine, J. A. Case research: The case writing process. Ontario, Canada: University of Western Ontario.

Lincoln, Y. L., & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills: Sage.

Lundeberg, M. A. (1993a, April). Gender differences in case analysis. Paper presented at the annual meeting of the American Education Research Association, Atlanta, Georgia.

Lundeberg, M. A. (1993b, April). Cognitive growth in case analysis. Paper presented at the annual meeting of the American Education Research Association, Atlanta, Georgia.

McAninch, A. R. (1991). Casebooks for teacher education: The latest fad or lasting contribution? Journal of Curriculum Studies, 23(4), 345-355.

McAninch, A. R. (1993). Teacher thinking and the case method:Theory and future directions. New York: Teachers College Press.

Merseth, K. K. (1990). Case studies and teacher education. Teacher Education Quarterly, 17(1), 53-62.

Merseth, K. K. (1991). The case for cases in teacher education. American Association for Higher Education. Washington, DC.

Morine-Dershimer, G. (1991, June). Case methods in teachereducation: Where do they fit? Paper presented at the case method in teacher education: A working conference, James Madison University, Harrisonburg, Virginia.

Mostert, M. P. (1993a, October). Practical issues in writing and teaching cases to special education student teachers. Paper presented at the annual meeting of the Midwestern Educational Research Association, Chicago, IL.

Mostert, M. P. (1993b, November). Using case studies: A collaborative, interactive approach to university teaching. Instructional Development Service fall workshop, University of Minnesota-Duluth, Duluth, MN.

Mostert, M. P. (1993c, November). Scholarship reconsidered: Teaching undergraduate courses in special/general education consultation and collaboration via the Case Method. Paper presented at the annual Minnesota System-Wide Undergraduate Teaching Conference, Minneapolis, MN.

Mostert, M. P. (1996, April). Cognitive aspects of case-based teaching. Paper to be presented at the annual meeting of the American Educational Research Association, New York, NY.

Mostert, M. P., & Kauffman, J. M. (1992, April). Experienced teachers and case-based instruction: An Analysis of their perceptions, learning, and written cases. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, California.

Mostert, M. P., & Kauffman, J. M. (1993). Preparing teachers for special and general education through case-based instruction: An analysis of their perceptions, learning, and written cases. Australasian Journal of Special Education, 16(2), 40-47.

Patton, M. Q. (1980). Qualitative Evaluation Methods. Newbury Park: Sage Publications.

Reffel, J. A., & Bartelheim, F. J. (1993, April). The influence of case-based instruction on reflective decision making. Paper presented at the annual meeting of the American Education Research Association, Atlanta, Georgia.

BEST COPY AVAILABLE